

XI. *A Letter from Dr. Laurence Garcin, of Neuchatel, F. R. S. to Sir Hans Sloane Bart. late P. R. S. concerning the Cyprus of the Ancients : Done from the French by W. Watfon, F. R. S.*

S I R,

Read Nov. 24. 1748. **T**HE Plant in Question is a Shrub,

which varies considerably in its Size and Figure, according to the Nature and Soil of the Country where it naturally grows, as well in *Asia* as in *Africa*, where this Plant is much used, both as a Medicine, and for its agreeable Odour.

Our Author has given us the true Characters of the Fructification of the *Cyprus*, after the Method of the celebrated *Linneus*.

1. Its *Calyx* is an expanded monophyllous Cup, cut into four Lobes, pointed at their Extremities, and continuing attached to the Fruit.

2. Its *Corolla* consists of four oval Petals, somewhat pointed and sinuous. They grow distant one from the other, and are placed between the Lobes of the *Calyx*.

3. It has eight erect *Stamina*, ranged two by two almost horizontally, and parallel to the Sides of the Petals, and surpass them in Length about half a Line. They grow from the Base of the Embryo at a little Distance one from the other, and arise diminishing in their Bulk to their Extremities. Their *Antheræ* or Summits form each of them a little kind of Purse.

4. Its

4. Its *Pistillum* is round, and occupies the Middle of the *Calyx*. Its Style is erect, and terminated with a pointed *Stigma*. Its Length somewhat exceeds that of the *Stamina*.

5. Its *Pericarpium* is a round dry Capsule, slightly four-corner'd; each of which Corners has a small Prickle. It is divided into four Compartments by an extremely delicate Membrane, arising from a *Placenta* which occupies the Centre of the Capsule.

6. Its Seeds are small and numerous: Each of them is pyramidal, and somewhat quadrangular, of which the Point is sometimes streight and sometimes crooked. Every Seed is fastened by its Point to the *Placenta*, as to a common Centre, and their Bases are sustained by the Sides of the Capsule, all the Cavity of which is filled by them.

There is but one Species of this Shrub generally known through all the East; and this is subject to vary according to the Climate, the Season, and the Soil.

Its Names are,

1. According to different Nations.

Greek, *κύπρος*.

Latin *Cyprus*.

Hebrew, *Copher*.

Arabian and } *Henna*.
Persic }

Egyptian, *Elhanne*.

Italian, *Alchanna*.

Spanish, *Alkenna*.

The Portuguese } *Foula*
in the Indies, } *Aybana*.

Apothecaries, *Alcanna*.

The People of } *Mail An-*
Malabar, } *schi*.

The Brachmans, *Mety*.

Malayans, *Daun Lacca*.

Javans, *Batschiar*.

Chinese, *Tsingka Hou*.

Indians, *Inne*.

At Bengal and } *Mendi*.
Surat, }

2. According to Authors.

Ligustrum Dioscoridis. Matthiol. 117.

Ligustrum Ægyptiacum latifolium; item angustifolium. C. Bauh. Pin. 476.

Ligustrum Ægyptium. Joh. Bauh. T. 1. p. 532.

Ligustrum orientale. Park. 1447. Raii Hist. 1603.

Rhamnus Malabaricus, fructu racemoso caliculato.
Raii Hist. 1573.

Its DESCRIPTION.

The *Cyprus* grows generally as a Shrub of ten or fifteen Feet in Height, and has very much the Appearance of Privet.

Its Trunk grows sometimes as thick as a Man's Thigh, is sometimes straight and sometimes crooked, and produces a great Number of Branches irregularly. Its outward Bark is ash-colour'd, and much furrow'd, and detaches itself from the Trunk of the Tree in long Scales or Pieces, by the Heat and Dryness of the Climate, as in the *Persian* Gulf. Its inward Bark is reddish without, and whitish within. That of the Branches is smooth and red, like that of the Hazel-tree, and green within. Its young Branches are straight, flexible, and moderately long. The Wood of the Trunk is hard and whitish.

Its Leaves are disposed in different Orders upon the same Twig. Sometimes they are placed opposite in Pairs along the small Branches, and this most generally cross-wise; sometimes by three and three; but then the Leaves are less, and this Disposition generally takes place in the larger Branches; sometimes they are alternate, but rarely, and then the Leaves are largest. The least Branches are most charged with Leaves, the larger ones least. All these

these Leaves are pointed at each End; the largest are two Inches long, and about an Inch broad in their Middle; the smallest bear half the Dimensions of the largest: Their Edges are even: They are smooth, shining, and of a beautiful green Colour: Their middle Rib, which serves to each Leaf as a short Pedicle, is terminated in their Point, but sends out, in its Passage through the Leaf, alternately four or five nervous Filaments on each Side. These Leaves are much like those of Privet.

The Flowers grow in Bunches at the Extremities of the young Branches, and are endowed with a very agreeable and singular Odour. They are of a Straw-colour; but as they grow old and wither, they become of the Colour of a Citron. The *Calyx* is more pale than the *Corolla* of the Flowers. Its Petals are turned up as much if not more than those small Petals are which adorn the Centre of a double Rose. The *Stamina*, which are white, transparent, and which grow from the Base of the Embryo of the Fruit, form as it were a double Cross, by their almost parallel Situation and Extension between the Petals. The Lobes of the *Calyx*, being of the same Length and Form of the Petals, seem to give to the intire Flower an octogonal Figure. The Summits or *Antheræ* are small, and of the same Colour as the Petals, each having a deep Furrow in its Bottom; the more these decay, the more yellow they grow, in the same manner as the Petals. The Furrow in the *Anthera*, which at first is of a palish black, grows of a deeper Hue, as the Flower fades. The *Pistillum*, after the Flower is gone, grows larger in the *Calyx*, and becomes, when perfectly ripe, a dry, membranous, round Fruit, of about three Lines in Diameter. But before
it

it arrives to this State, it resembles very much a fleshy Berry, green on one Side, purplish, and sometimes black on the other, with very little Juice. This false Berry is the growing Capsule, the Side of which is soft, succulent, and very thick; which, in proportion as it increases, becomes thin, membranous, dry, and brittle: In becoming thus capacious and thin it gives Room to a large Number of pyramidal Seeds, very close one to another, and fastened all by their Points to a common Center, a kind of *Placenta*. When this Capsule is in its Perfection, its Outside is shining, and not unlike the Seed of Coriander in Colour. The *Pericarpium* is as it were divided into four *Loculi*, by Membranes so delicate, that they must be regarded with great Attention, to be satisfied of their Reality. The exterior Form of this Fruit sufficiently shews this Division, by its Roundness being interrupted by four slight Ribs, like those of a Melon, which shews as many Cells. The Membranes, which divide these Cells, arise from the *Placenta*, and are inserted into the Sides of the Capsule.

The Seeds, which fill all the Capsule, amount to about four or five dozen, according as they are more or less nourished; because the larger ones receiving more Nourishment, make the smaller ones abortive. They are always so pressed in their Apartments, that their pyramidal Figure is owing only to this Pressure, which arises from their reciprocal Increase. The pyramidal Points of these Seeds are crooked in some, and bent in others, according to the Direction given them in their growing. Their Colour is red or brown, and always somewhat shining.

Remarks.

REMARKS.

We find, in the ancient Writers of Plants, such as *Theophrastus*, *Dioscorides*, and *Pliny*, who have all in their manner treated of Vegetables, of how much Esteem the *Cyprus* was among the Ancients. The Historian *Josephus*, and *St. Jerome* have mention'd it as a rare and precious Plant, placing it in the same Rank with the most valued Spices. The fine Smell, which its Flowers send forth in the Countries where they grow naturally, as in *Egypt*, *Syria*, *Arabia*, *Persia*, &c. has occasioned its Use in the earliest Time; and the same Use continues in those Countries. Its being twice mentioned in * *Solomon's Song*, is a very great Proof of its being much valued in the most ancient time. We there see it was accustomed to be cultivated even in their Vineyards. The Perfumers in old times made thereof an Oil or precious Ointment for various Uses; but principally to give their Anointings a grateful Odour, and to make supple the Limbs of the Body.

Modern Authors have given themselves great Trouble to be thoroughly satisfied of the History of this Plant. There have been great Controversies among them concerning it in endeavouring to settle its Description; but it must be confessed they have made a very small Progress in discovering to us its true Characters. How many Mistakes have the Botanists

* *Solomon's Song*, chap. i. v. 14. ch. iv. v. 13. In both these Places the *English* Translation of the Bible has it *Camphire*, instead of *Cyprus*.

stanist of the two last Centuries made, owing to the bad Descriptions of this Plant, which the Ancients have left us.

Dioscorides, who, by describing the Plants he treats of too briefly, always leaves their Characters imperfect, says (perhaps after some other Author more ancient than himself) *that the Leaves of the Plant in Question are like those of the Olive tree; that its Flowers are in Bunches, and that its Fruit is black, like that of Elder.* This was enough to make the *Latins* conjecture, that the *κύνρεος* of this Author was the *Ligustrum* or Privet; and the more so, as the *Cyprus* was intirely unknown to them, since it only grew in *Egypt* and in *Syria*, where it was always called *Henna*, or *Alhenna*, and, by Corruption, *Alkanna*.

There is some Appearance, that, as the *Greeks* received a good Quantity of this Drug from the Isle of *Cyprus*, as a Species of Merchandize, they would chuse to call it *Cyprus*, rather than give it any other Denomination, on account of the Quantity furnished to them from the Isle of that Name. *Pliny* took it first for a kind of Privet of *Ligustrum*, which grew particularly in *Egypt*, and afterwards he thought it to be the common *Ligustrum* or *Europe*: This shews how uncertain he was as to the Plant in Question. He judged ill in comparing the Fruit of the *Cyprus* with that of the Jujube-tree; but was more happy in likening the Fruit (Capsule) to that of the Coriander, as they agree in Colour, though that of the *Cyprus* was more large. *Matthiolus*, who thought himself greatly above his Cotemporaries in the Theory of Plants, asserts boldly, that our Plant was the common Privet:

And

and in this he thinks himself justified, not only from the Description of *Dioscorides*, but from the Virtues attributed to the *Cyprus* by *Pliny*. He even ridicules those who think that the *Ligustrum* and *Cyprus* are different Plants. *Fuchsius*, who wrote before *Mathiolus*, had nevertheless Reason to believe them of a different *Genus*, by the Account given of the *Egyptian* Plant by *Pliny*; but he was wrong in confounding it with the *Phillyrea* of *Dioscorides*, and in this Mistake has been followed by *Dodonæus*.

Bellonius, who had seen this Plant in its Place of Growth, well knew that it was not the *Ligustrum* or Privet: He saw also how the Commentators of the *Arabian* Authors were deceived in taking it for such.

Rawwolf and *Prosper Alpinus*, who met with it in their Travels, after having observed it in the Places of its Growth, believed, as *Pliny* had done, that it was a kind of *Ligustrum*, which approached very near to that of *Europe*. They have each of them given a different Figure; which made *Caspar Bauhin* believe that there must be two new Species of *Ligustrum*; but herein he was not follow'd by the ingenious Mr. *Ray*. In fact, we ought to acknowledge, by the Characters here set down, that our *Cyprus* is of a *Genus* truly different, and the only one of its kind.

The *Hortus Malabaricus* has given a Figure of this Plant under the Name of *Mail-Anschi*, which represents the End of a large Branch ill-chosen, and somewhat wither'd, without doubt by the Fault of the Designer, who has drawn it in its natural Size; which is greater in *Malabar* than elsewhere, because

of the Rains which fall there in Abundance half the Year. This Shrub is less in all its Parts in *Arabia*, and to the South of *Persia*, because in those Countries it rains seldom; but, in Recompence, its Flowers have much more Smell than in *Malabar*. It must be remarked here upon this Occasion, that the Description just now given, and which contains the Size of the Parts, was made in a Garden in the *Persian* Gulf belonging to the *Dutch* Factory, and situate about a League from the Town of *Gameroon*, otherwise called *Bender-Abassi*, where there was one of these Trees carefully preserved, which was the first I saw in the *Indies*; as it was complete in all its Parts, having Flowers and Fruit; and as it appeared to me agreeable and curious, especially on account of the fine Smell of the Flowers, and as it was a new *Genus* to be established in Botany, I examined it with great Exactness, and noted its Characters, Figures, and Dimensions. I did not conceive it to be the *Cyprus*, not then knowing what it was. I asked the People of the Country the Name of this beautiful Shrub: They only called it *Henna*, and I could learn no other Name: They assured me it had no other Name, either in *Persia*, or in *Arabia*. It was on the 1st of *December* 1721. that I observed it, and described it under the Name of *Frutex Persicus, foliis Ligustri, flore et fructu racemoso, Henna vulgo dictus*. I thus characterized it, in Expectation of finding it, if it had already been described among Authors, after my Return to *Europe*. When I returned in 1730. I had the Satisfaction to find it in Mr. Ray's History, by the Description which he has given of it, extracted from various Authors, in the
Chapter

Chapter of *Ligustrum* under the *Synonyma* of *Parkinson*, and to see it in the other Authors I have mention'd, especially the Figure given by *Rauwolf*, which is not a bad one, and which is copied by *Clusius*, *Dodonæus*, *Parkinson*, and *Dalechamp*.

The Figure in the *Hortus Malabaricus* under the Name of *Mail-anschi*, does not so happily represent our *Cyprus*, as that excellent Work generally does the Plants it treats of. The Leaves of this Plant there are half-wither'd, and not in their natural Disposition. *Rauwolf*'s Figure is much nearer the Truth. The Flowers are not much better represented than the Leaves, in the *Hortus Malabaricus*; as, besides other things of less Moment, the Authors of that Work have neglected to make the Petals appear between the Lobes of the *Calyx*, as always happens in a natural State; by which Disposition the Flower appears of an octagonal Figure. *Rumphius*, who has written an History of the Plants of *Molucca*, has given a Description of this Shrub, not different from mine.

By what is here laid down of the Characters of this Plant, we plainly see that it differs widely from the *Oxyacantha* and *Rhamnus*; of one of which the Authors of the Notes to the *Hortus Malabaricus* suspected the *Cyprus* to be a Species. This occasion'd Mr. *Ray* to range it under the last, supposing its Fruit to be a Berry, which nevertheless it is not. This learned Author moreover could not think that the *Mail-anschi* was the *Cyprus*, because of the Difference in the Descriptions among Authors, and of the Imperfection of those of *Rauwolf* and *Alpinus*. *Rumphius*, just now quoted, has ill compar'd the

Colour of the Leaves of *Cyprus* to those of the Olive-tree.

This Shrub, so cherished among the Eastern Nations, is cultivated in *Africa*, *Asia*, and all the *Indies*; that is to say, from near the Equinoctial even to 35 Degrees of North Latitude; where it is much used, as we shall find by the great Commerce caused thereby in the *Levant*, according to the Relations of Travellers of Credit.

This Plant does not love Shade, even under the Torrid Zone, because of the violent Rains there at the time of the Western *Monsoon*, no more than it does in cold Countries, our Author means those of the fifth Climate; but towards the Tropick, and even in *Arabia*, it grows best when a little shelter'd from the Sun. In hot and dry Countries, as in the *Persian* Gulf, where I first saw it, it produced a great Number of Boughs and Branches very short, which gave it the Appearance of White-thorn. On the contrary, towards the Equator, its Branches are further from each other, and longer, occasioned by the Moisture from the Rain. The Back splits into Scales, and detaches itself in Pieces from the Trunk, in those Countries where it rains seldom; but in *Malabar*, in the Isles of *Ceylon* and *Sunda*; the Back continues intire and united almost all the Year, because of the Moisture of those Places.

Rauwolf remarks, that the *Turks* and *Moors* cultivate this Plant with Care, and even keep it in Pots, on account of the Smell of the Flowers, which somewhat resemble Musk. They keep these Pots in Winter in Chambers or Caves to preserve the Plants from Cold.

Our

Our Author forgot to remark one Circumstance, mentioned by *Bellonius* in the first Book of his Observations (*Chap. 44. apud Clusium*), where it is said, that the *Henna*, or *Alchanna*, which is our *Cyprus*, differs from Privet, because the Leaves of Privet fall, and those of *Cyprus* continue all the Year. But this Observation is of no Weight, because this Difference is only apparent; and it is certain, that if our Privet was cultivated in *Egypt*, its Leaves would not fall off in Winter, because it is not there sufficiently cold.

The Uses of Cyprus.

Bellonius, who was the first of the Moderns who treated of this Shrub under the Name of *Alcanna*, and spoke of its Culture in *Egypt*, tells us, that the Powder of its Leaves is so great an Article of Commerce among the *Turks*, that they load several Vessels from *Alexandria* for *Constantinople*, where the Sale of it is so great, that the Grand Signor's Revenue therefrom amounts yearly to 18000 Ducats. According to him, the great Consumption of this Powder arises from its being used in beautifying the Skin and Nails, in making them red with a Decoction made therewith. The Women, he says, generally use it all over *Turkey*, to dye the Skin of those Parts which are from the Navel downwards, as well as their Hands and their Hair. Their Children are served in the same manner. They consider this as a great Ornament; and that the Colour may hold longer, and penetrate deeper, they apply it usually when they go out of the Baths. This Practice

Practice of dyeing, to beautify the Body, is extended even to their Horses, of which they tinge the Mane, the Tail, and the Hoofs. They often add Alum to heighten the Colour. This Powder is sent from *Constantinople* to *Russia*. Let us now consider the other Properties of *Cyprus*.

It is not necessary here to take notice of what *Dioscorides* and *Pliny* attribute to this Plant; they may be consulted, if, at the same time, they are regarded as being very little skilled in its true Qualities. Our Author contents himself with saying, that the *Persians* and *Arabians*, who appear to have been anciently the first that used this Plant, frequently use at present not only its Flowers to perfume their Linen, their Cloaths, and their Tables, but make a greater Use of its Leaves in a Decoction, for the Cure of all Distempers of the Skin, as the Itch, Scabs, and Ring-worm, which the Air of their Country causes from its Heat, and from the Drought which often reigns there to a great Degree. These Disorders, if they are neglected to be cured as soon as possible in dry Climates, easily degenerate into the Leprosy; and it is on account of these Disorders of the Skin, that the eating of Pork is forbidden to People of every Religion in these Countries; because that Food there is known to occasion these Distempers.

All the Nations of the *East Indies* make use of it in Medicine, for the same, as well as for several other Disorders; but they particularly use the Leaves to dye their Nails; which our Author thinks they had originally from the *Arabians*. In dyeing their Nails, the *Indians* make use of the fresh Leaves,
which

which always grow in great Plenty in their Gardens, and apply them beaten upon their Nails, mixing with them sometimes a little Lime and Juice of Citron. This Colour lasts a great while upon the Skin, on account of Sweating. A strong Decoction of the Leaves in Water is sometimes used to tinge their Nails, but more generally their Skin and Hair.

There is Reason to believe, that this pretended beautifying of the Skin, the Hair and Nails, which long Custom has established among the Eastern Nations, owes its Origin to a quite different Principle than that of beautifying. The Ancients had no other View in the Beginning, than the Prevention of pruriginous and leprous Disorders in the Skin, to which their Climate subjected them, as well as to preserve them from Vermin, as the Leaves of *Cyprus* have that Property. But as in using Baths with these Leaves therein, they dyed their Skin either red or yellow, according to the Preparation, they accustomed themselves to this Colour by degrees, and afterwards regarded it as a salutary Embellishment.

These Baths, which there are constantly employed for the Cleanliness and Health of the Skin, and which the Necessity of using has established as a Point of Religion, and a Duty, for the better Prevention of these Maladies, is certainly a true Method to preserve as well the Body as the Skin in a good State. These good Effects are extended further by using the *Alcanna*; because its Colour, passing in the Opinion of these People for a necessary Ornament, and a Mark of Cleanliness, makes the Practice of bathing better observed.

It

It seems to our Author, that these Remarks should be communicated, as well as the Characters and Description of the Plant in Question, to render its History more complete, and by these means to make it known; to the end that the Curious may form some Opinion of the great Praises which the Ancients have bestowed upon this Plant. I am

S I R,

Your, &c.

Laurence Garcin.

E R R A T U M.

In *Page* 541, *l.* 22, for *Art.* XI. read X.